NEW COMPOSITAE FROM THE TRANSVAAL.

by

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The elaboration of the large family Compositae, with its 108 Transvaal genera, for the *Flora of the Transvaal* has been completed, but the MS. awaits facilities for publication. The work has brought to light a number of new species and varieties. Delay in the publication of their descriptions causes inconvenience to students, and as it is uncertain how soon the rest of Volume II of the *Flora* can appear, it seems best to publish them independently.

Through the courtesy of the Editor of the Journal of South African Botany and of the Director of the Royal Botanic Gardens, Kew, arrangements have been made to describe part of the new species at Cape Town, and part in the *Kew Bulletin.*

TRIBE SENECIONEAE.

Euryops discoideus Burtt Davy sp. nov.; ab *E. Gilfillanii* Bolus, cui affinis, foliis applanatis nec teretibus nec canaliculatis, apice acutis, basi haud lanatis, capitulis disciformibus nec radiatis distinguitur.

Herba nana perennis. *Folia* integra linearia, usque ad 7.5 cm. longa, 0.15 cm. lata, scabrata, acuta, basi glabra, margine infra medium hispida. *Pedunculus* gracillimus striatus, usque ad 20 cm. longus. *Capitulum* solitarium, 8 mm. latum; flores radii O, *Involucri bracteae* circiter 5 mm. longae, 3 mm. latae, striatae.

Transvaal. Barberton District: Kaapsche Hoop, alt. 4,000 ft., November, *Rogers* 21275 in herb. Kew (*type*).

Euryops Rogersii Burtt Davy sp. nov.; affinis *E. pedunculato* N. E. Br., sed foliis patentibus densissime dispositis basin versus haud ciliolatis, involucri bracteis obtusis (nec acuminatis) differt.

Suffrutex nanus ramosus; rami erecti densissime foliati. *Folia* trifida, circiter 1.5 cm. longa, dense atque spiraliter disposita, patentia vel plus minusve reflexa, ad basin haud ciliolata, costa cum nervis 2 lateralibus persistentibus ut rami spinis rigidis erectis obtegantur. *Pedunculi* 3—8 terminales, 11—13 cm. longi, leviter striati vel laevigati. *Involucrum* 1 cm. latum; bracteae ad basin modo connatae, multinervosae, apicem obtusum versus abrupte angustatae. *Flores radii* ligula circiter 11 mm. longa, 2.5 mm. lata.

TRANSVAAL. Barberton District: Kaapsche Hoop, November, *Rogers* 21444 (*type*)

An ornamental plant slightly resembling some forms of *E. abrotanifolius.*

TRIBE ANTHEMIDEAE.

Eriocephalus hirsutus Burtt Davy sp. nov.; affinis *E. glabro* Thunb., sed foliis et involucri bracteis dense fulvo-hirsutis distinguitur.

Suffrutex lignosus usque ad 20 cm. (vel ultra ?) altus. *Folia* minuta 4—5 mm. longa, linearia, teretia, dense fulvo-hirsuta, in ramulis brevissimis cicatricosis fasciculata. *Inflorescentia* laxe corymbosa, omnino dense fulvo-hirsuta; bracteae ad 3 mm. longae. *Capitula* solitaria vel pauca, 3 mm. diametro; pedicellus ad 3 mm. longus. *Involucri bracteae* ovatae, 3.5 mm. longae, 1.5 mm. latae, dense fulvo-hirsutae.

TRANSVAAL. Waterberg District: at Klippan, *Rehmann* 5232 in herb. Kew (*type*).

An interesting northerly extension of the genus, which is largely represented in the Karroo, Namaqualand, and the South-Western Cape. *E. glaber* Thunb. occurs in Natal.

A species (*E. aspalathoides* ?) found in the Kuruman Division, British Bechuanaland, is known as "Kapok-bos" or "Snow-bush," and is stated to be "good for all kinds of live-stock."

TRIBE CALENDULEAE.

Osteospermum striatum Burtt Davy sp. nov.; affine (ut videtur) *O. caulescenti* Harv., sed caule simplice nec ramoso, achaeniis alatis differt.

Herbae caudex perennis, lignosus, haud foliatus; caulis erectus annuus simplex, alte striatus, ad 10 cm. altus, primum tomentosus demum glabrescens. *Folia* scabrida sessilia, lineari-lanceolata, inferiora 1—1.5 cm. superiora ad 4.5 cm. longa, 0.3—0.5 cm. lata, apice acuta, basin versus vix angustata, costa cum nervis parallelis et supra et subtus prominentibus. *Capitulum* solitarium; pedunculus pubescens striatus, circiter 8 cm. longus. *Involucri bracteae* striatae, pubescentes, usque ad 8 mm. longae, ovato-lanceolatae, apice acuminatae. *Flores radii* 1 cm. longi, 0.5 cm. lati; *flores disci* ad 8 mm. longi. *Achaenia* alata.

TRANSVAAL. Barberton District: Kaapsche Hoop, September, *Wager* 15571 in herb. Kew (*type*). Carolina District: Waterval Onder, October, *Rogers* 5937.

TRIBE INULEAE.

Gnaphalium Nelsonii Burrt Davy sp. nov. ; inter species austro-africanas caulibus altis erectis rigidis perennibus, foliis utrinque albo-tomentosis haud decurrentibus, involucri bracteis brunneo-flavescentibus distinctum.

Herba perennis ; caules e basi ascendente erecti, rigidi, 17—25 cm. alti, dense imbricate foliati, superne ramosi. *Folia* sessilia, erecta vel ascendentia, 1 cm. longa, 0.2 cm. lata, linearia, apice acuta, utrinque albo-tomentosa. *Inflorescentia* globosa vel ramosa. *Capitula* circiter 10 subsessilia, 2.5—3 mm. longa, 3 mm. lata. *Involucri bracteae* anguste ellipticae, brunneo-flavescentes.

Transvaal. Pretoria District : Vander Walt, "in native mealie gardens" August, *Nelson* 289 in herb. Kew (*type*).

Helichrysum andersoniense Burtt Davy sp. nov. ; ab *H. calocephalo* Schltr., cui affine, capitulo solitario differt ; affine *H. albissimo* Marl., sed foliis longioribus oblanceolatis laxius imbricatis minus lanatis, caule decumbente, involucri bracteis brevioribus exterioribus haud candidis differt ; ab *H. adenocarpum* DC. capitulis multo majoribus, involucri bracteis multiseriatis, caule et ramis lignosis, ramulis floriferis brevibus validis distincta.

Caulis lignosus perennis, decumbens vel ascendens, ramosus ; ramuli dense foliati. *Folia* patentia sessilia, circiter 4 cm. longa, 1.8 cm. lata, oblonga vel oblanceolata, apice obtusa, basi late amplexicaulia, supra scabrida vel plus minusve floccosa, subtus leviter cinereo-lanata ; nervi 3 prominentes. *Pedunculi* 4—5 cm. longi ; bracteae foliaceae. *Capitula* solitaria, circiter 4 cm. lata. *Involucri bracteae* 6—8-seriatae, ad 2 cm. longae, apicem acutum versus angustatae, exteriores minute scaberulae purpureo- vel brunneo-suffectae, interiores lucentes candidae.

Transvaal. Lydenberg District : summit of Mount Anderson, September 1919, *Rogers* 22990 in herb. Kew (*type*).

Helichrysum brunneum Burtt Davy sp. nov. ; *H. gerberaefolium* Oliv. et Hiern., Fl. Trop. Afr. 3, 353 pro parte, non Sch. Bip. ; affine *H. gerberaefolio* Sch. Bip., sed foliis caulinariis pluribus latioribus, inferioribus basi subauriculatis (nec angustatis), involucri bracteis manifeste albo-lanatis differt ; affine *H. leiopodio* DC., sed foliis caulinariis haud reductis, quam internodia multo longioribus differt.

Caulis perennis erectus, circiter 70 cm. altus, striatus, leviter floccosus, superne sparse foliis parvis vel bracteis foliaceis vestitus ; internodia 6.5—9 cm. longa. *Folia* ascendentia, internodiis longiora, 11—13.5 cm.

longa, 2.3—2.5 cm. lata, oblonga, apice obtusa vel acuta, basi subauriculata late amplexicaulia, supra leviter floccosa vel glabrescentia, subtus dense cinereo-lanata, margine integra. *Cyma* corymbosa ramosa 5—6 cm. lata. *Capitula* subsolitaria ; pedunculi circiter 0.5 cm. longi. *Involucrum* fuscum campanulatum, supra medium constrictum, circiter 6 mm. longum, 5 mm. latum ; *bracteae* ad basin albo-lanatae, aureo-brunneae, superne glabrae plus minusve rugulosae, apice saepius acutae.

TRANSVAAL. Pietersburg District : Shilouvane, *Junod* 1632 in herb. Kew (*type*).

Specimens collected by Kirk in Portuguese East Africa, near Satohi, 3,500 ft. alt., October 1859, and in Nyasaland on Mt. Mlanje, by Whyte, appear to belong here.

Helichrysum flavum Burtt Davy sp. nov. ; affine *H. subglomerato* Less., sed foliis lineari-subulatis laxe floccoso-lanatis (nec pilis implexis argenteis obtectis), et pedunculis tenuioribus sparse bracteatis differt ; ab *H. oligopappo* Bol., foliis acuminatis erectis vel ascendentibus, haud pilis implexis argenteis obtectis distinguitur.

Suffrutex : rami numerosi, circiter 25 cm. alti, e caule foliato decumbente ascendentes, pedunculo sparse bracteato terminati. *Folia* ascendentia imbricata persistentia, inferiora superioribus vix dissimilia, 1.5—2 cm. longa, 0.3 cm. lata, lanceolata vel lineari-subulata, acuminata, basi amplexicaulia, supra juventute floccosa demum glabrescentia, subtus leviter cinereo-lanata, margine revoluta. *Cymae* circiter 1.5 cm. latae. *Capitula* in receptaculo applanato subtus lanato congesta, circiter 3 mm. longa, 1 mm. lata, aureo-flavescentia.

TRANSVAAL. Barberton District : White River, April, *Rogers* 20144 in herb. Kew (*type*).

Helichrysum Galpinii N.E.Br. var. **tenuius** Burtt Davy var. nov. ; a typo ramulis elongatis tenuioribus nec foliis marcescentibus vestitis, pedunculis 2—3 cm. longis, et involucri bracteis minus lanatis differt.

TRANSVAAL. Lydenburg District : Belfast, among granite rocks, alt. ca. 6,500 ft., December, 1905, *Bolus* 11970 in herb. Kew (*type*).

Helichrysum infuscum Burtt Davy, sp. nov. ; affine *H. appendiculato* Less., sed involucri bracteis brunneis vel purpurascentibus basi albo-lanatis differt.

Herba nana perennis circiter 9—12 cm. alta : caulis solitarius (?), ascendens vel suberectus, basi circiter 3 mm. diametro, imbricate foliatus. *Folia rosellae basalis* cinereo-lanata, 3.5—4 cm. longa, 1.7—2 cm. lata, oblonga vel oblanceolata, apice obtusa, basi amplexicaulia. *Folia caulinaria* ascendentia, imbricata, dense lanata, circiter, 2.5 cm. longa,

0.8 cm. lata, lanceolata, apice acuta. *Inflorescentia* densa capitata globosa, praeter folia paullo exserta, circiter 2 cm. lata. *Capitula* subsessilia, circiter 8 mm. longa, 6 mm. lata, campanulata, fusca. *Involucri bracteae* gilvae, ad apicem brunneae vel purpurascentes, basi albo-lanatae, exteriores acutae, interiores obtusae mucronulatae.

TRANSVAAL. Pietersburg District: The Downs, alt. 4,000 ft., December, *Rogers* 21959 in herb. Kew (*type*).

Helichrysum pullulum Burtt Davy sp. nov.; affine *H. cymoso* Less., sed foliis densius dispositis, basi auriculatis, et involucri bracteis fulvis (nec aureis) differt; ab *H. revoluto* Less., inflorescentia sub-globosa, capitulis paucioribus minoribus distinctum.

Suffrutex lignosus circiter 30 cm. altus; caules ramosissimi, basi circiter 2 mm. diametro; rami usque ad apicem foliati, internodiis dense cinereo-lanatis circiter 0.5—0.75 cm. longis. *Folia* inferiora decidua vel marcescentia; superiora ascendentia, circiter, 2 cm. longa, 0.3 cm. lata, lineari-lanceolata, integra, apice acuta, basi auriculata amplexicaulia, utrinque subtomentosa incano-virescentia vel supra glabrescentia. *Inflorescentia* capitata vel ramosa, globosa, 1.5—2 cm. lata. *Capitula* pauca vel compluria, parva, 3 mm. longa, 2—3 mm. lata, subturbinata, fulva. *Involucri bracteae* multiseriatae adpressae vel apice subsquarrosae.

GRIQUALAND EAST. Umzimkulu Division: Umzimkulu River at Handcock's Drift, alt. 2,500 ft., December, *Tyson* 3086 in herb. Kew (*type*).

NATAL. Utrecht Division: near Charlestown, *Medley Wood* 5722; without precise locality, *Medley Wood* 3611 and 3621.

TRANSVAAL. Heidelberg District: Greylingstad, *Rand* in herb. Brit. Mus. 1318.

Helichrysum subluteum Burtt Davy, sp. nov.; affine *H. latifolio* Thunb., sed caulibus plus minusve imbricate foliatis, et involucri bracteis luteis differt; ab *H. pedunculare* DC., caulibus foliis et capitulis valde minoribus, et involucri bracteae luteis distinctum.

Herba perennis; caules e foliorum rosella basali oreintes, foliis reductis imbricatis vel bracteis foliaceis vestiti; internodia 2.5—4 cm. longa, dense adpresso-cinereo-tomentosa. *Folia basalia* integra, circiter 5 cm. longa, 1.5 cm. lata, oblonga, apice obtusa vel acuta, basi late amplexicaulia, supra subglabra subprominenter 5-nervia, subtus pelli argentea separabili tecta. *Folia caulinaria* erecta, internodiis saepius breviora, 2.5—3.5 cm. longa, 0.4 cm. lata, lineari-lanceolata, apice acuta, basi amplexicaulia, leviter floccosa. *Inflorescentia* capitata globosa, circiter 2 cm. lata. *Capitula* pauca, circiter 6 mm. longa, 7 mm. lata, campanulata, subsessilia, fulva. *Flores* in sicco brunnei. *Involucri bracteae*

pallide luteae, apicem versus fuscae, lanceolatae vel oblongae, exteriores acutae, interiores obtusae vel mucronulatae.

TRANSVAAL. Pietersburg District: Woodbush Hill, November, *Leendertz-Pott* 4532 in herb. Kew (*type*). Lydenburg District: near Lydenburg, *Atherstone* sine numero, in herb. Kew.

Helichrysum truncatum Burtt Davy sp. nov.; affine *H. campaneo* S. Moore et *H. aureo-nitenti* Sch. Bip., sed foliis caulinariis supernis apicem truncatum versus brunneo-scariosis differt.

Herba perennis circiter 20 cm. alta; caules 2—3, arcuatim ascendentes, basi circiter 1 mm. diametro, omnino imbricate foliati. *Folia basalia* caespitosa, dense argenteo-tomentosa, integra, 3—4 cm. longa, 0.4—0.5 lata, anguste lanceolata vel lineari-lanceolata, apice acuta. *Folia caulinaria* angustiora, 1—2 cm. longa, linearia vel subulata, erecta, imbricata, inferiora apice acuta, superiora ad apicem truncatum brunneo-scariosa, in bracteas involucrales sensim abeuntia. *Inflorescentia* densa capitata globosa, circiter 2 cm. lata. *Capitula* sessilia vel subsessilia, 5 mm. longa, 2 mm. lata, fusca. *Involucri bracteae* brunneo-pellucidae, apice rotundatae, ad basin albo-lanatae.

TRANSVAAL. Lydenberg District: Devil's Knuckles, between Lydenburg and Spitzkop, March, *Wilms* 739 in herb. Kew (*type*).

Helichrysum uninervium Burtt Davy sp. nov.; affine *H. callicomo* Harv., sed foliis acutis breviter petiolatis, capitulis majoribus, et involucri bracteis recurvis vel subsquarrosis differt.

Suffrutex virgatus; rami foliati tenues, circiter 30 cm. longi, basi circiter 1.5 mm. diametro, leviter adpresso-tomentosi. *Folia* ascendentia vel patentia, 1.5 cm. longa, 0.3—0.4 cm. lata, oblanceolata, breviter petiolata vel subsessilia, basin versus angustata, apice acuta vel mucronulata, et supra et subtus prominenter uninervia tomento olivaceo-virescente obtecta. *Inflorescentiae* corymboso-cymosae paucicapitulatae, 2—3.5 cm. latae, in ramulis terminales. *Capitula* pedunculata flava, 6—8 mm. longa, 2—3 mm. lata, turbinata. *Involucri bracteae* lanceolatae, acuminatae, apice subsquarrosae vel recurvae, exteriores fulvae gossypinae, interiores flavae glabratae.

TRANSVAAL. Lydenburg District: Pilgrim's Rest, *Rogers* 18000a, in herb. Kew (*type*).